

IN THE SPECIFICATION

Please replace the paragraph beginning on page 8, line 20 with the following:

Figure 6 shows a steel pipe which is coated with plastic from the inside and in which the layer situated against the steel 24 is thermally insulating adhesion plastic 25 and the second layer is cross-linked polyethylene, i.e. ~~meltingly extruded processible~~ PEX 26. The adhesion plastic 25 can be for example grafted polyethylene. The adhesion plastic 25 is preferably foamed. When the steel pipe is coated from the inside, the coating plastic is hot in the beginning so that its diameter remains large, whereas when the plastic cools the diameter of the plastic layer tends to decrease. The foamed adhesion plastic 25 sticks to the surface of the steel pipe but allows the inside to shrink. In such a case, the foam bubbles stretch in the radial direction, i.e. the foam bubbles are oriented radially, which increases the strength of the pipe. The foamed adhesion plastic 25 comprises preferably at least 10%, most preferably about 25%, of fine filling agent, such as calcium carbonate. The elastic modulus of the foam can thus be made high, i.e. the structure will be strong. Further, the foamed adhesion plastic 25 is very good heat insulator against the PEX 25. On the other hand, when a steel pipe is coated from the inside, the orientation of the plastic pressed inside can be frozen efficiently, since the steel pipe cools the pipe effectively from the outside. When steel pipes coated in this manner are to be joined together, for example a cross-linked plastic sleeve 27 that is compressed and warmed in place can be used. The cross-lined plastic sleeve 27 tends to return to the size of the diameter preceding the compression, and the expansion is provided by means of heating. The joint will then be extremely tight. It is also possible to use for the joint a sleeve 28 that is provided in the outside with mastic or some other adhesive with which the

sleeve 28 can be made to stick to the pipe. Electrofusion can also be used. At the outside of the joint, it is possible to place a clamping collar 29 that is made of a strong material and that can be positioned to rest on a metal casing, such as steel 24. The clamping collar 29 receives axial tensile forces. The joint can also be implemented by welding, so that the adhesion plastic 25 acts as a good heat insulator against the innermost layer. The coating of steel pipes can be realized by applying the principle shown in Figure 5. Other metal pipes and concrete pipes can also be coated in a similar manner.